

Claims

1. A method of determining services accessible via a subscription having an account and at least a first limit in a communication system, characterized by the method comprising the steps of:
 - defining at least a first and a second set of services to be used with the subscription, each set of services defining services accessible via the subscription;
 - comparing (203) the balance of the account with the first limit;
 - using (204) the first set of services when the balance of the account does not reach the first limit; and
 - using (207) the second set of services when the balance reaches the first limit.
2. A method as claimed in claim 1, characterized by the method further comprising the steps of:
 - using in the communication system access point names to define where and how to connect the user of the subscription;
 - selecting during connection activation the access point name to be used with this connection;
 - defining a first access point name for the first set of services; and
 - defining a second access point name for the second set of services.
3. A method as claimed in claim 1 and 2, characterized by the communication system comprising a firewall; and
 - the method further comprising the step of defining accessible services via a set of services by defining at least a firewall configuration for the set of services.
4. A method as claimed in claim 1, 2 or 3, characterized by the method further comprising the step of defining accessible services via a set of services by defining at least a range of allowed addresses for the set of services.

5. A method as claimed in any of the preceding claims, c h a r - a c t e r i z e d by the method further comprising the step of indicating the set of services which is to be used by the charging characteristics to be applied.

6. A method as claimed in any of the preceding claims, c h a r - a c t e r i z e d by the second set of services comprising services free of charge.

7. A method as claimed in any of the preceding claims, c h a r - a c t e r i z e d by the second set of services being a subset of the first set of services.

8. A method as claimed in any of the preceding claims, c h a r - a c t e r i z e d by the method further comprising the step of informing the user of the subscription of the services accessible via the second set of services in response to using the second set of services.

9. A method as claimed in any of the preceding claims c h a r - a c t e r i z e d by
the subscription being a postpaid subscription;
the first limit being the maximum allowed amount of the bill; and
the balance of the account indicating the amount of the bill to be charged from the subscription.

10. A method as claimed in any of claims 1 to 8, c h a r a c t e r - i z e d by
the subscription being a prepaid subscription;
the first limit being the preset minimum value for the account; and
the balance of the account indicating the amount of money the subscriber still has in use.

11. A method as claimed in claim 10, c h a r a c t e r i z e d by at least the second set of services comprising a deposition service.

12. A method as claimed in claim 11, characterized by the depositing service utilizing the authentication of the communication system when authenticating the one who wants to deposit.

13. A communication system providing a subscription with an account and at least a first limit, the communication system comprising:
a first node (SCP) monitoring the balance of the account, characterized in that
the communication system (S) comprises memory for storing definitions of at least a first and a second set of services to be used with the subscription, each set of services defining services accessible via the subscription; and
the communication system (S) is arranged to compare the balance with the first limit and to allow access to the first set of services when the balance has not reached the first limit, and to allow access to the second set of services when the balance has reached the first limit.

14. A communication system as claimed in claim 13, characterized in that
the first node (SCP) is arranged to perform the comparison during connection activation and to indicate which set of services is to be used with the connection; and in response to a connection with access to the first set of services to trigger deactivation of the connection when the balance reaches the first limit.

15. A communication system as claimed in claim 13, characterized in that
the communication system (S) further comprises a second node (HLR) maintaining subscription information including at least an indication indicating an allowed set of services for the subscription;
the first node (SCP) is arranged to perform the comparison and in response to the balance reaching the first limit to direct the second node to set the second set of services as the allowed set of services and in response to the balance, not any more reaching the first limit after reaching the first limit, to direct the second node to set the first set of services as the allowed set of services; and

the second node (HLR) is arranged to send at least information on the allowed set of services as a part of the subscription information to the communication system during connection activation; in response to a received direction from the first node (SCP) to modify the first indication to correspond to the received direction; and in response to modifying the allowed set of services of an active connection to trigger deactivation of the connection.

16. A communication system as claimed in claim 15, characterized in that the subscription information maintained in the second node (HLR) further includes at least identification information on the first and second set of services and the indication indicates which one of the sets of services is the allowed set of services.

17. A communication system as claimed in claim 14, 15 or 16 characterized in that
the communication system (S) supports the General Packet Radio Service; and
the connection is activated by activating a PDP context.

18. A network node (SCP) in a communication system providing a subscription with an account and at least a first limit, the network node being arranged to monitor the balance of the account,
characterized in that
the network node (SCP) is arranged to compare the balance with the first limit and to allow access to a first set of services when the balance does not reach the first limit, and to allow access to a second set of services when the balance reaches or has reached the first limit.

19. A network node (SCP) in a communication system providing a subscription with an account and at least a first limit, the network node being arranged to monitor the balance of the account,
characterized in that
the network node (SCP) is arranged to communicate with a second network node; to compare the balance with the first limit; and to indicate to the second network node which set of services from among at least two different

set of services defined for the subscription is the allowed set of services on the basis of said comparison.

20. A network node (SCP) as claimed in claim 19, characterized in that the network node (SCP) is arranged to indicate the allowed set of services in response to the balance reaching the limit and in response to the balance not any more reaching the limit.

21. A network node (GGSN, 2, FW) in a communication system providing a subscription, characterized in that the network node (GGSN, 2 FW, HLR) is arranged to receive from the communication system an indication indicating the use of a certain set of services from among at least two different set of services defined for the subscription; and in response to receiving the indication to provide access only to services included in the indicated certain set of services.

22. A network node as claimed in claim 21, characterized in that the network node (GGSN, 2 FW, HLR) is arranged, in response to receiving the indication, to inform the user of the subscription of the services accessible via the indicated certain set of services.

23. A network node as claimed in claims 21 or 22, characterized in that the network node (GGSN, 2 FW, HLR) is arranged to receive an access point name as the indication of the set of services, the access point name being used in the communication system to define where and how to connect the user of the subscription.

24. A network node as claimed in claims 21, 22 or 23, characterized in that the network node is an application server (2).